

In the Claims:

Please cancel claims 1-3 without prejudice or disclaimer.

Please add the following new claims 10-32:

Sub C' >
B1
~~10. (new) A receiver, comprising:~~

~~a substrate;~~

~~a first mixer disposed on the substrate;~~

~~a differential filter coupled to an output of the first mixer; and~~

~~a second mixer, disposed on the substrate and coupled to an output of the differential filter.~~

~~11. (new) The receiver of claim 10, wherein the differential filter is a surface acoustic wave (SAW) filter.~~

~~12. (new) The receiver of claim 10, wherein the differential filter is configured external to the substrate.~~

~~13. (new) The receiver of claim 10, wherein the differential filter is disposed on the substrate.~~

~~14. (new) The receiver of claim 10, wherein the substrate is processed using CMOS.~~

~~15. (new) The receiver of claim 10, wherein the second mixer provides image rejection.~~

~~16. (new) The receiver of claim 10, wherein the second mixer is a differential I/Q mixer that provides image rejection.~~

~~17. (new) The receiver of claim 10, wherein the first mixer and the second mixer are differential mixers.~~

18. (new) The receiver of claim 10, wherein the differential filter removes at least one channel from a plurality of channels received from the output of the first mixer.

Sub C2 → 19. (new) A receiver that processes a RF signal having a plurality of channels, the receiver comprising:

- a substrate;
- a first circuit, disposed on the substrate, that translates the RF signal to a first IF signal;
- a differential filter that removes at least one channel from the first IF signal;
- a second circuit, disposed on the substrate, that performs image rejection and generates a second IF signal; and
- at least the first IF signal comprising a differential signal.

20. (new) The receiver of claim 19, wherein the second IF signal comprises a second differential signal.

21. (new) The receiver of claim 19, at least a portion of the differential filter being disposed external to the substrate.

22. (new) The receiver of claim 19, further comprising an automatic gain control (AGC) circuit coupled to an output of the second circuit, and disposed on said substrate.

23. (new) The receiver of claim 19, wherein the first circuit and the second circuit are differential mixer circuits.

24. (new) The receiver of claim 23, wherein the second circuit is an I/Q differential mixer circuit.

Sub C3 → 25. (new) A method for processing a RF signal having a plurality of channels, comprising:

- (1) mixing the RF signal with a first differential local oscillator signal to produce a first differential IF signal;
- (2) removing at least one unwanted channel from the first differential IF signal using a differential filter to produce a second differential IF signal;
- (3) adjusting the first local oscillator signal so that a selected channel in the plurality of channels is shifted into a passband of the differential filter; and

C3 cancel
(4) mixing the second differential IF signal with a second differential local oscillator signal to produce a second differential IF signal.

26. (new) The method of claim 25, wherein the plurality of channels are television channels.

27. (new) The method of claim 25, further comprising the step of:

(5) removing at least one unwanted channel from the second differential IF signal.

28. (new) The method of claim 25, wherein steps (1), (3), and (4) are performed on a common substrate.

29. (new) The method of claim 25, wherein step (2) is performed external to the common substrate.

30. (new) The method of claim 25, further comprising the step of:

(5) performing automatic gain control on the second IF signal on the common substrate.

31. (new) The method of claim 25, wherein step (4) includes the step of removing at least one unwanted image from the second differential IF signal.

Sub C4 32. (new) A receiver for processing a plurality of channels, comprising:

a substrate;

a first differential mixer disposed on the substrate;

a differential filter coupled to an output of the first differential mixer and configured external to the substrate; and

a second differential mixer, disposed on the substrate and coupled to an output of the differential filter, said second differential mixer providing image rejection.